

CLAIMS

What is claimed is:

1. 1. A peptide according to formula 1
 2. (formula 1) $(X1)_n\text{-A-A-V-A-L-L-P-A-V-L-L-A-L-L-A-P-(X2)}_m$
 3. wherein X1 and X2 are selected from one or more charged amino acid residues
 4. such that each X1 and each X2 may be the same or different charged amino acid
 5. residue, further wherein n has a value of 0 or 3-10, and m has a value of 0 or 3-10.
 1. 2. The peptide according to claim 1, wherein either m=0 or
 2. n=0, wherein if m = 0, n has a value from 4 to 10, and if n = 0, m has a value
 3. from 4 to 10.
 1. 3. A peptide according to formula 2
 2. (formula 2) $(X1)_n\text{-P-A-V-L-L-A-L-L-A-(X2)}_m$
 3. wherein X1 and X2 are selected from one or more charged amino acid residues
 4. such that each X1 and each X2 may be the same or different charged amino acid
 5. residue, further wherein n has a value of 0 or 3-10 and m has a value of 0 or 3-10.
 1. 4. The peptide according to claim 3, wherein either m=0 or
 2. n=0.
 1. 5. A pharmaceutical composition, comprising an antiviral
 2. peptide and a pharmaceutically acceptable carrier, wherein the pharmaceutical
 3. composition is effective for treating or preventing viral infections in a mammalian
 4. host.
 1. 6. The pharmaceutical composition according to claim 5,
 2. wherein the antiviral peptide further comprises a solubility tag.

1 7. The pharmaceutical composition according to claim 5,
2 wherein the antiviral peptide is selected from the group consisting of SEQ ID NOS:
3 1-15, SEQ ID NOS 18-30, fragments thereof and derivatives thereof, wherein if the
4 antiviral peptide is SEQ ID NO:14, SEQ ID NO:15, a fragment or derivative
5 thereof, then X1 and X2 are selected from one or more charged amino acid residues
6 such that each X1 and each X2 may be the same or different charged amino acid
7 residue, further wherein n has a value of 0 or 3-10, and m has a value of 0 or 3-10.

1 8. The pharmaceutical composition according to claim 7,
2 wherein the antiviral peptide is selected from the group consisting of SEQ ID
3 NOS: 1-13.

1 9. The pharmaceutical composition according to claim 7,
2 wherein the antiviral peptide is selected from the group consisting of SEQ ID
3 NOS: 14-15.

1 10. The pharmaceutical composition according to claim 7,
2 wherein the antiviral peptide is SEQ ID NO:14, wherein m=0 and n has a value
3 of 4 to 10.

1 11. The pharmaceutical composition according to claim 5,
2 wherein the composition is effective at treating or preventing infections from
3 enveloped viruses.

1 12. The pharmaceutical composition according to claim 11,
2 wherein the composition is effective at treating or preventing infections from one or
3 more viruses selected from the group consisting of human immunodeficiency virus,
4 herpes simplex viruses and cytomegalovirus.

1 13. The pharmaceutical composition according to claim 12,
2 wherein the composition is effective at treating or preventing infections from one or
3 more herpes simplex viruses.

1 14. The pharmaceutical composition according to claim 5,
2 wherein the composition is effective at treating or preventing infections from
3 nonenveloped viruses.

1 15. A method of treating or preventing a virus infection in a
2 warm blooded animal comprising administering to the animal an effective amount of
3 the pharmaceutical composition according to claim 5.

1 16. A method of treating or preventing a virus infection in a
2 warm blooded animal comprising administering to the animal an effective amount of
3 the pharmaceutical composition according to claim 10.

20
19
18
17
16
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1